

REMARKS

Applicants thank the Examiner for examining the application. Claims 1-27 are pending.

Applicants' Note

Applicants respectfully request that the Examiner identify the particular reason or reasons why the Examiner decided to reject claims 1-4, 10, 12, 14, 16, and 21-27 twice, first under § 102(e) and then again under § 103(a). Applicants note that MPEP §§ 707.07(g) and 904.03 state, respectively, that "Piecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds available, avoiding, however, undue multiplication of references." and "The examiner is not called upon to cite *all* references that may be available, but only the "best." (37 CFR 1.104(c).) Multiplying references, any one of which is as good as, but no better than, the others, adds to the burden and cost of prosecution and should therefore be avoided."

In this application, even though Applicants below argue around the rejection under § 102(e), which applies to all pending claims, that is, claims 1-27, Applicants nonetheless believe that rejection to have been complete and, in these circumstances, the "best" reference, and thus Applicants submit that the additional rejection under § 103(a) is redundant and unnecessary. Further, if the Examiner felt that the rejection under § 102(e) was not sufficient, Applicants do not understand why the Examiner then additionally rejected only **some** of the claims under § 103(a), and not all of them. Applicants respectfully submit that they do not understand why the Examiner chose to reject claims 1-4, 10, 12, 14, 16, and 21-27 a second time, given these circumstances. Indeed, the one reason provided in MPEP § 904.03 ("Sometimes the best reference will have a publication date less than a year prior to the application filing date, hence it will be open to being overcome under 37 CFR § 1.131. In these cases, if a second reference exists which cannot be so overcome and which, though inferior, is an adequate basis for rejection, the claims should be *additionally* rejected thereon.") does

not apply here, as the primary reference under § 102(e), Burbeck et al., was filed more than one year prior to the filing of the pending application.

Regardless of the reason(s) behind the Examiner's decision, Applicants have fully responded to both rejections below.

Claim Rejections – 35 U.S.C. § 102(e)

The Examiner rejected claims 1-27 under 35 U.S.C. § 102(e) as being clearly anticipated by U.S. Patent No. 7,143,139 to Burbeck et al.

Applicants' independent claim 1 requires, among other things, providing a database of bindings of request identifiers to replicas where each binding is a record having a request identifier, a replica identifier and a binding expiration time, the database associated with a first router of the plurality of routers; maintaining a change log of records entered into the database, each change log entry having a change event generated by the first router and an event number sequential to an event number of a preceding change event in the change log; maintaining a current version vector associated with the database and the change log, the current version vector entry for the first router being a most recent event number from the change log, the current version vector entry for each other router being a most recent event number received at the first router from that other router; receiving an update of change events generated at another router in the plurality; and reconciling the database according to the received update such that the client session is maintained.

The Examiner primarily cited to the claims of Burbeck et al. as disclosing these limitations. More specifically, the Examiner cited to "Col. 28" (with no particular lines), which is primarily claim 1 of Burbeck et al., col. 3 lines 9-26, col. 20 lines 50-59, col. 3 lines 1-4, and col. 28 lines 1-37 (which is claim 1) as disclosing the providing limitation; "Col. 28" (again with no particular lines) and col. 30 lines 5-64 (which are various dependent claims), as disclosing both the first maintaining limitation and the second maintaining limitation, as well as the receiving limitation; and to the abstract as disclosing the second reconciling limitation. While Applicants acknowledge that the Examiner is allowed to cite to any portion of the reference, Applicants respectfully

request that the Examiner not cite to simply claim language of the reference, particularly as broad of cites as provided in this Office Action, as Applicants must then engage in the exercise of claim interpretation. Applicants respectfully submit that anything claimed in Burbeck et al. must be supported by the specification, and thus the Examiner should provide cites to the relevant portions of the specification, and not just to the bulk of the claims of Burbeck et al.

In any case, none of the cited section sections, nor indeed any of the text, of Burbeck et al. actually discloses providing a database of bindings of request identifiers to replicas where each binding is a record having a request identifier, a replica identifier and a binding expiration time, the database associated with a first router of the plurality of routers; maintaining a change log of records entered into the database, each change log entry having a change event generated by the first router and an event number sequential to an event number of a preceding change event in the change log; maintaining a current version vector associated with the database and the change log, the current version vector entry for the first router being a most recent event number from the change log, the current version vector entry for each other router being a most recent event number received at the first router from that other router; receiving an update of change events generated at another router in the plurality; and reconciling the database according to the received update such that the client session is maintained, all as required by Applicants' independent claim 1.

The Examiner equates the plurality of routers required throughout Applicants' independent claim 1 to the "persistent broadband tiers" as disclosed in Burbeck et al., and the plurality of replicas required throughout Applicants' independent claim 1 to the "one or more nodes" as disclosed in Burbeck et al. However, this argument makes no sense, as the persistent broadband tiers disclosed by Burbeck et al. are formed of the one or more nodes disclosed by Burbeck et al. In contrast, Applicants' independent claim 1 requires a plurality of routers that are separate entities from the plurality of replicas, wherein the plurality of routers forwards information to the plurality of replicas, which execute one or more applications. Indeed, the word "router" or its equivalent is not found anywhere in Burbeck et al. Burbeck et al. does not disclose that a database

containing bindings is associated with a first router, as required by Applicants' independent claim 1. Burbeck et al. also does not disclose maintaining a change log of records entered into the database, each change log entry having a change event generated by the first router, as required by Applicants' independent claim 1. Burbeck et al. further does not disclose maintaining a current version vector associated with the database and the change log, the current version vector entry for the first router being a most recent event number from the change log, the current version vector entry for each other router being a most recent event number received at the first router from that other router, or receiving an update of change events generated at another router in the plurality, also as required by Applicants' independent claim 1. Burbeck et al. **cannot** disclose any of these limitations, because these limitations all require the presence of a plurality of routers, and Burbeck et al. does not disclose even a single router, much less a plurality of routers. Further, Applicants fail to see where Burbeck et al. discloses a change log, change events, the maintenance of either, a database of bindings, or any of the other limitations of Applicants' independent claim 1.

Indeed, Applicants respectfully submit that they fail to see the applicability of Burbeck et al. to the claims of the present application. Burbeck et al. is directed towards an entirely different task than the current invention. Burbeck et al. discloses methods, systems, and the like that classify nodes in tiers to reduce network traffic, including using a reputation level for nodes that describes how a node performs in terms of responding to requests. Applicants' claimed invention, on the other hand, provides for the binding of a DNS name to a particular IP address such that it is persistent, so that when a session exists between a particular client device and a copy of an application executing on a replica (i.e., server or the like), the session is maintained because any further requests by the client of a particular DNS name are directed to the binded IP address, representing the copy of the application the client had previously dealt with (*see at least* specification pages 3-9).

Therefore, for at least the reason(s) given above, Applicants' independent claim 1 is not disclosed by Burbeck et al., and thus, Applicants' independent claim 1 is allowable over Burbeck et al.

Applicants' independent claims 21, 24, 25, and 26 all include limitations similar to those of Applicants' allowable independent claim 1. Therefore, for at least the reason(s) given above with regards to Applicants' allowable independent claim 1, Applicants' independent claims 21, 24, 25, and 26 are themselves not disclosed by Burbeck et al., and thus, Applicants' independent claims 21, 24, 25, and 26 are allowable over Burbeck et al.

Applicants' dependent claims 2-20, 22-23, and 27 depend from, respectively, Applicants' allowable independent claims 1, 21, and 26. Therefore, for at least the reason(s) given above with regards to Applicants' allowable independent claims 1, 21, and 26, Applicants' dependent claims 2-20, 22-23, and 27 are themselves not disclosed by Burbeck et al., and thus, Applicants' dependent claims 2-20, 22-23, and 27 are allowable over Burbeck et al.

Claim Rejections – 35 U.S.C. § 103(a)

The Examiner rejected claims 1-4, 10, 12, 14, 16, and 21-27 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,047,315 to Srivastava in view of ACM SIGACT News Distributed Computing Column 8 by Rajsbaum.

Applicants' independent claim 1 requires, among other things, providing a database of bindings of request identifiers to replicas where each binding is a record having a request identifier, a replica identifier and a binding expiration time, the database associated with a first router of the plurality of routers; maintaining a change log of records entered into the database, each change log entry having a change event generated by the first router and an event number sequential to an event number of a preceding change event in the change log; receiving an update of change events generated at another router in the plurality; and reconciling the database according to the received update such that the client session is maintained.

Similar to the Examiner's rejection under § 102, this rejection also relies heavily on the claims of Srivastava, and thus Applicants' statements about this with regards to

Burbeck et al. are also maintained for this rejection under § 103. Also similar to the Examiner's rejection under § 102, Applicants respectfully submit that they fail to understand how Srivastava applies at all to Applicants' claimed invention. Though Srivastava does teach a plurality of routers, Srivastava fails to teach or suggest providing a database of bindings of request identifiers to replicas where each binding is a record having a request identifier, a replica identifier and a binding expiration time, the database associated with a first router of the plurality of routers; maintaining a change log of records entered into the database, each change log entry having a change event generated by the first router and an event number sequential to an event number of a preceding change event in the change log; receiving an update of change events generated at another router in the plurality; reconciling the current version vector according to the received update; and reconciling the database according to the received update such that the client session is maintained, all as required by Applicants' independent claim 1. Srivastava is directed to routing packets from a client to a server in a load-balanced network along the same path, wherein a path is first determined and then followed by each subsequent packet. Though Applicants' claimed invention does deal with directing requests to the same replica, such that a session state is maintained, unlike in Srivastava, where the first path is the same path used, the route may (and frequently) does change in Applicants' claimed invention, thus necessitating the maintenance of the change log, the receipt of an update of change events, and the reconciling of the current version vector and the database, all as described by Applicants' independent claim 1, none of which are taught or suggested by Srivastava. Thus, for these reasons alone, Applicants' independent claim 1 is not obvious in light of Srivastava, either alone or in combination with Rajsbaum, and therefore Applicants' independent claim 1 is allowable over the combination of Srivastava with Rajsbaum.

However, apart from the above, Applicants' independent claim 1 is still not obvious in light of Srivastava, either alone or in combination with Rajsbaum. As the Examiner knows, to maintain a *prima facie* rejection under 35 U.S.C. § 103(a), there must be "some teaching, suggestion, or motivation to do so found either explicitly or

implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.” MPEP § 2143.01. The Examiner stated that the motivation to combine Srivastava with Rajsbaum is “because it would reduce network latency and bandwidth”, Office Action page 15.

Applicants respectfully submit that this is not a proper motivation to combine the references. The recent Supreme Court decision in *KSR v. Teleflex* is the most relevant current case regarding the combination of references in an obviousness rejection under 35 U.S.C. § 103. In a memorandum dated May 3, 2007, Margaret A. Focarino, Deputy Commissioner for Patent Operations, states that “The Court noted that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it was “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed.” and “[I]n **formulating a rejection under 35 U.S.C. 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.**” (emphasis in original) (retrieved from http://patentdocs.typepad.com/patent_docs/files/uspto_may_3_2007_memo_re_ksr.pdf on August 20, 2007).

Applicants respectfully submit that the Examiner’s suggested motivation is a conclusory statement, simply indicating a potential advantage of combining these references, and does not provide the explicit analysis of specifically why the combination would achieve such a result that is required at least under the Supreme Court opinion and the Patent and Trademark Office’s own internal directive.

Thus, Applicants’ submit that for these reasons alone, the Examiner has not provided a proper teaching, suggestion, or motivation to combine Srivastava with Rajsbaum, and thus Applicants’ independent claim 1 is not obvious in light of Srivastava in view of Rajsbaum, and therefore Applicants’ independent claim 1 is allowable over Srivastava and Rajsbaum.

Applicants' independent claims 21, 24, 25, and 26 all include limitations similar to those of Applicants' allowable independent claim 1. Therefore, for at least the reason(s) given above with regards to Applicants' allowable independent claim 1, Applicants' independent claims 21, 24, 25, and 26 are themselves not obvious in light of Srivastava in view of Rajsbaum, and thus, Applicants' independent claims 21, 24, 25, and 26 are allowable over the combination of Srivastava with Rajsbaum.

Applicants' dependent claims 2-4, 10, 12, 14, 16, 22-23, and 27 depend from, respectively, Applicants' allowable independent claims 1, 21, and 26. Therefore, for at least the reason(s) given above with regards to Applicants' allowable independent claims 1, 21, and 26, Applicants' dependent claims 2-4, 10, 12, 14, 16, 22-23, and 27 are themselves not obvious in light of Srivastava in view of Rajsbaum, and thus, Applicants' dependent claims 2-4, 10, 12, 14, 16, 22-23, and 27 are allowable over the combination of Srivastava with Rajsbaum.

Applicants acknowledge at this time that the Examiner's failure to reject claims 5-9, 11, 13, 15, and 17-20 under § 103(a) means that the Examiner has concluded that Srivastava and Rajsbaum do not apply to claims 5-9, 11, 13, 15, and 17-20 and thus claims 5-9, 11, 13, 15, and 17-20 are allowable over Srivastava and Rajsbaum, either alone or in combination.

CONCLUSION

Applicants believe this Amendment and Response to be fully responsive to the present Office Action. Thus, based on the foregoing Remarks, Applicants respectfully submit that this application is in condition for allowance. Accordingly, Applicants request allowance of the application.

Applicants hereby petition for any extension of time required to maintain the pendency of this case. If there is any fee occasioned by this response that is not paid, please charge any deficiency to Deposit Account No. 50-3735.

Should the enclosed papers or fees be considered incomplete, Applicants respectfully request that the Patent Office contact the undersigned collect at the telephone number provided below.

Applicants invite the Examiner to contact the Applicants' undersigned Attorney if any issues are deemed to remain prior to allowance.

Respectfully submitted,

/SPM/

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